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air-incident
 $NA = \sin \theta$
 resolving power: $\lambda / (2NA)$

with cover layer: $\lambda' = \lambda / n_0$
 $NA' = \sin \theta' = \sin \theta / n_0 = NA / n_0$
 resolving power: $\lambda' / (2NA) = \lambda / (2NA)$

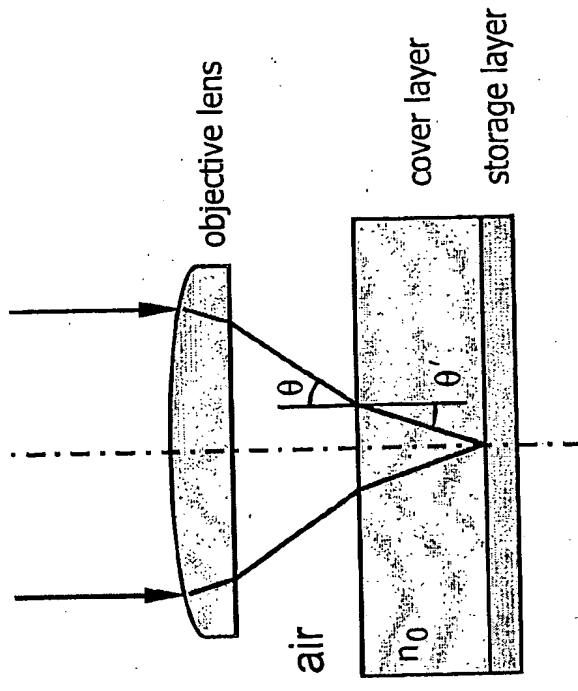
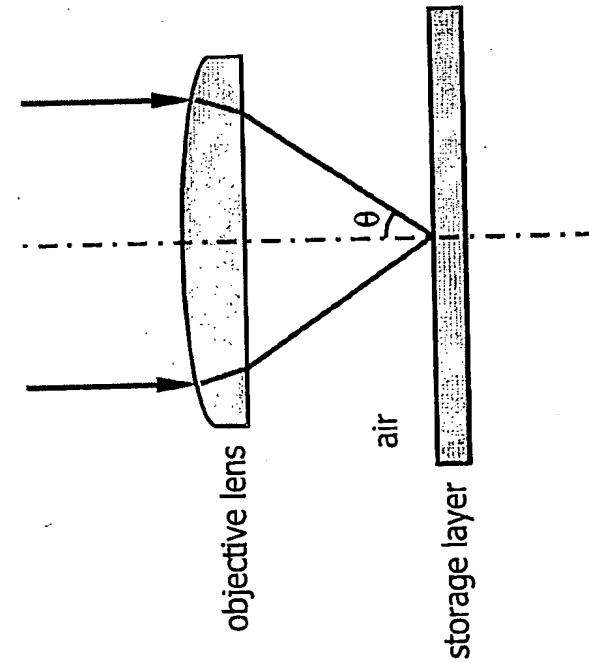


FIG.1B

FIG.1A



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air-incident with SIL
resolving power: $\lambda'/(2NA)$

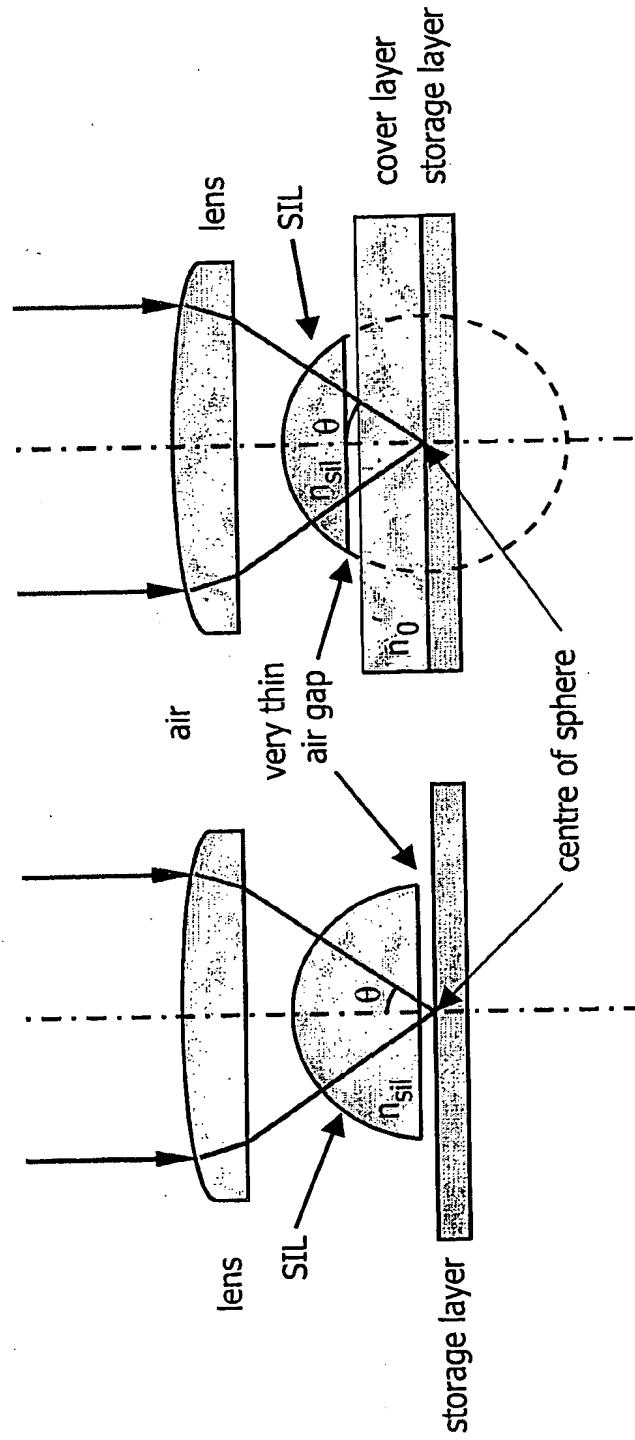


FIG.2B

FIG.2A

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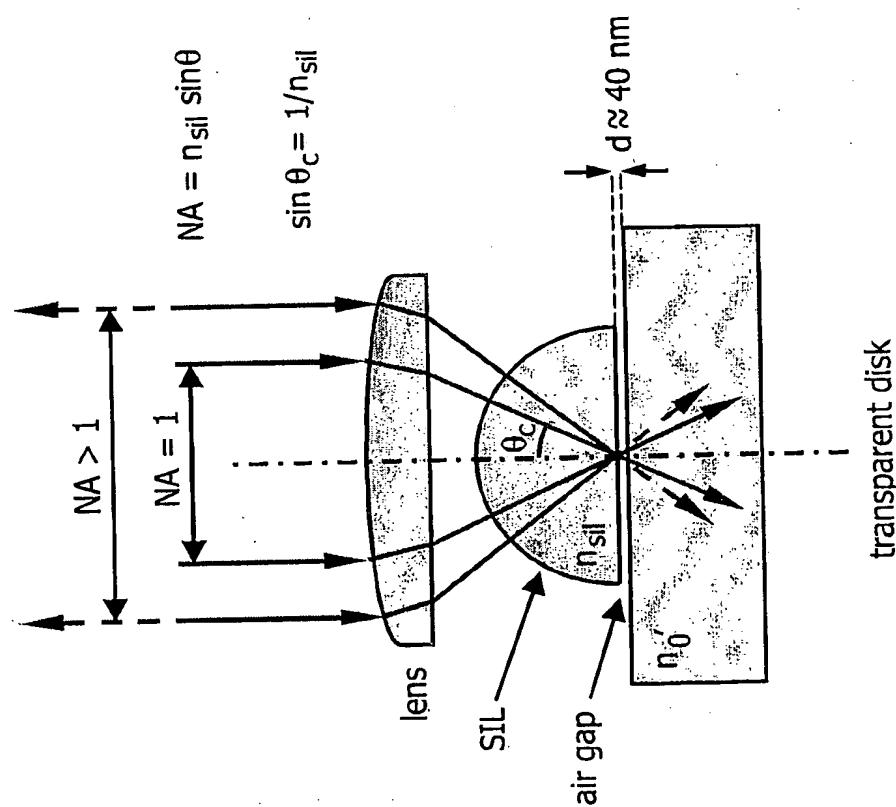


FIG.3

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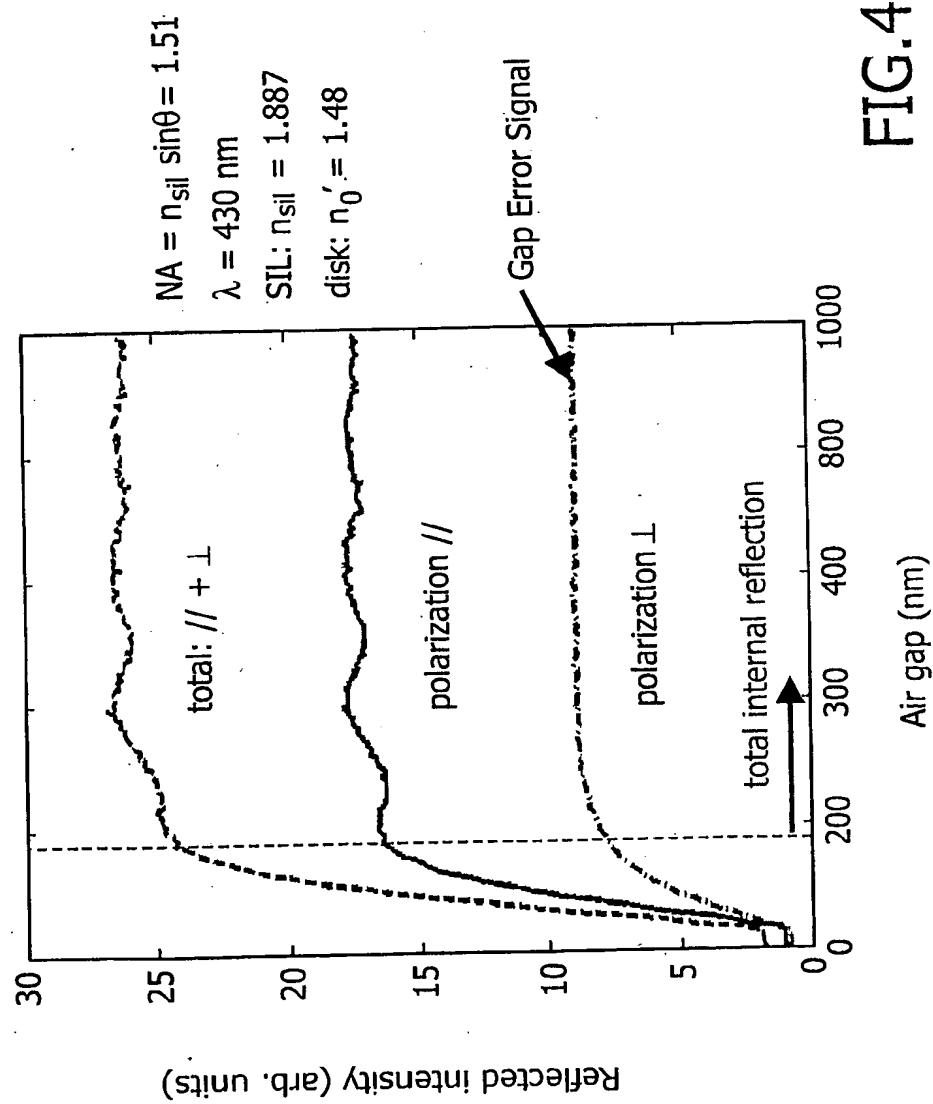


FIG.4

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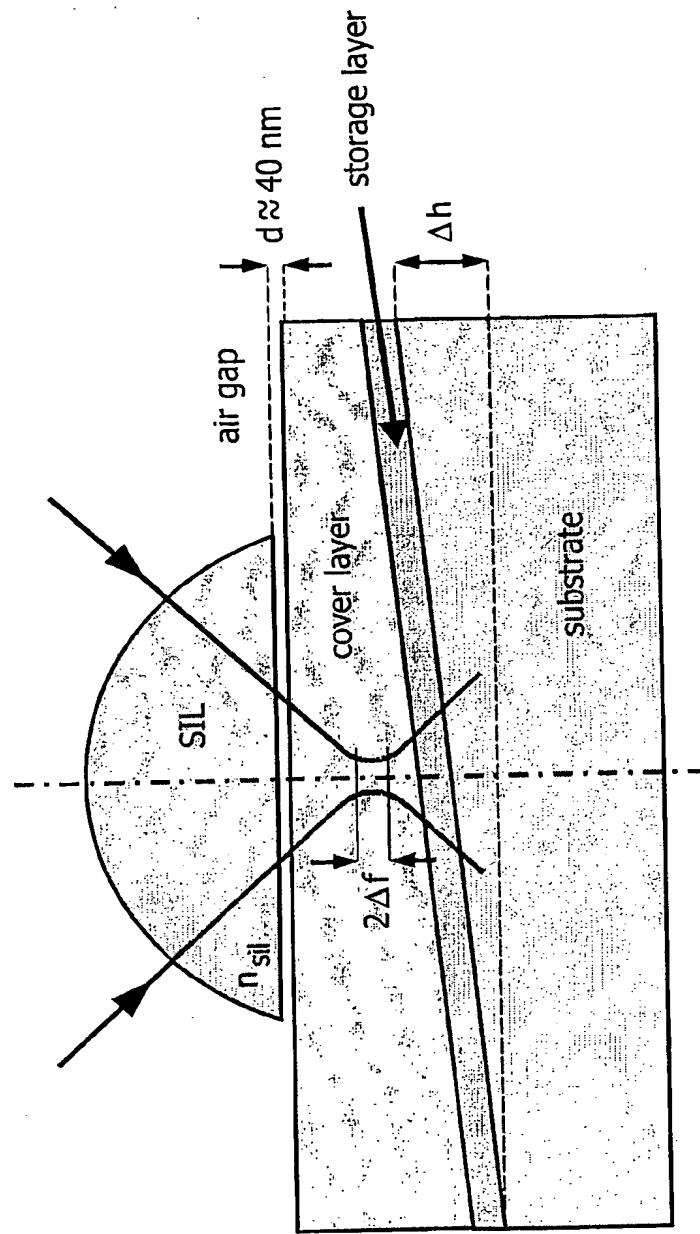


FIG.5

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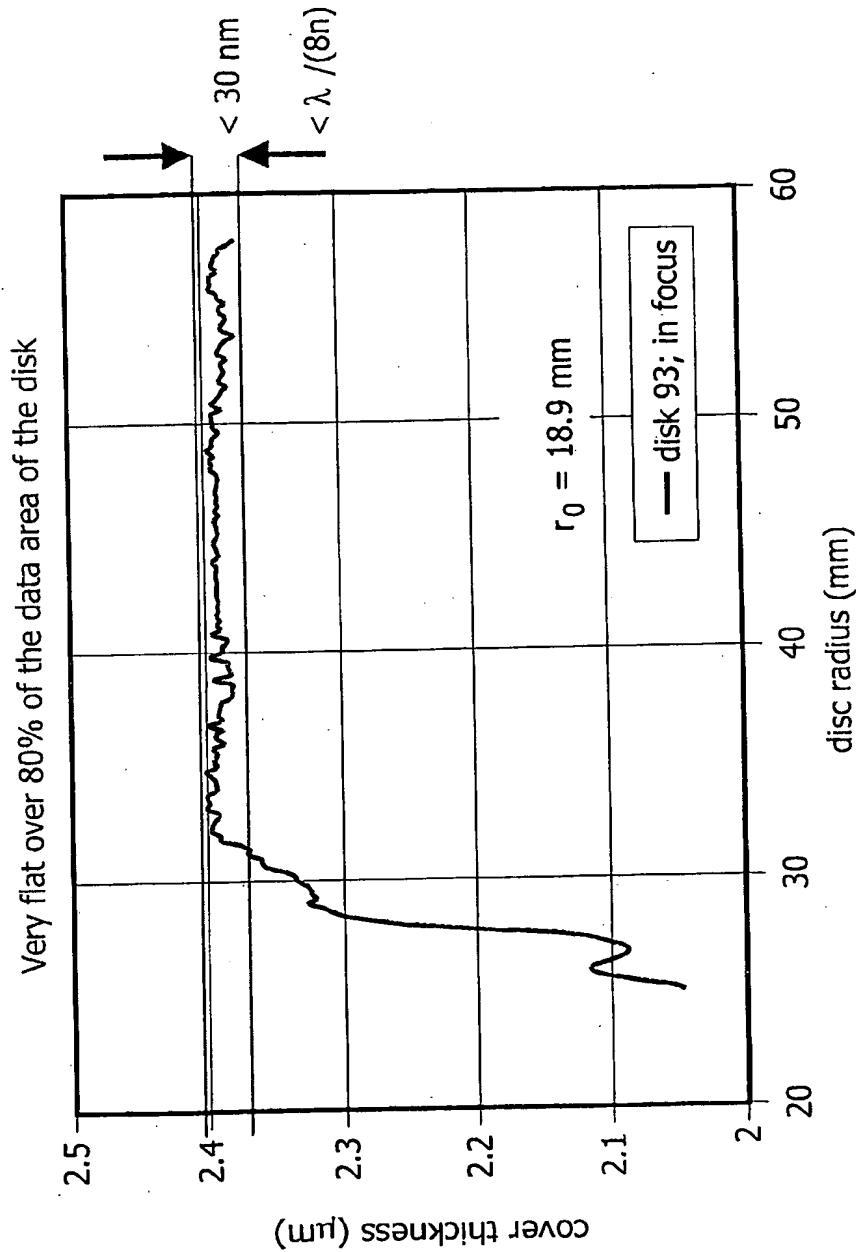


FIG.6

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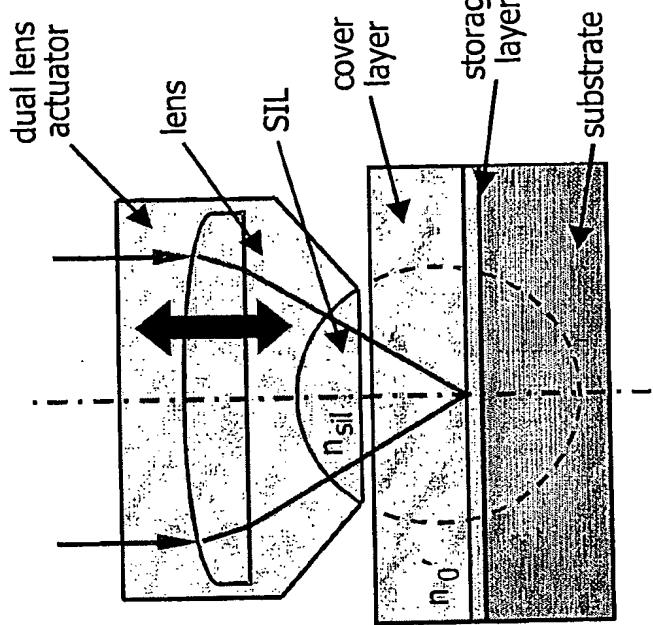


FIG.7C

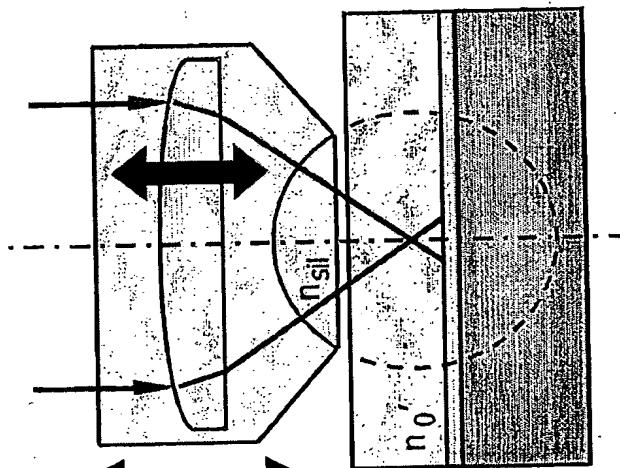


FIG.7B

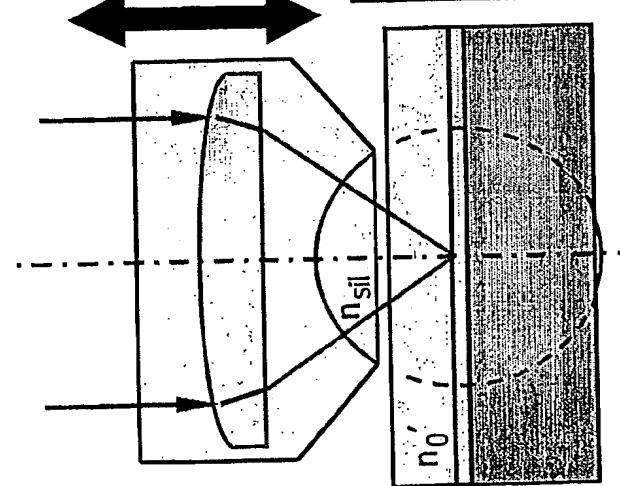


FIG.7A

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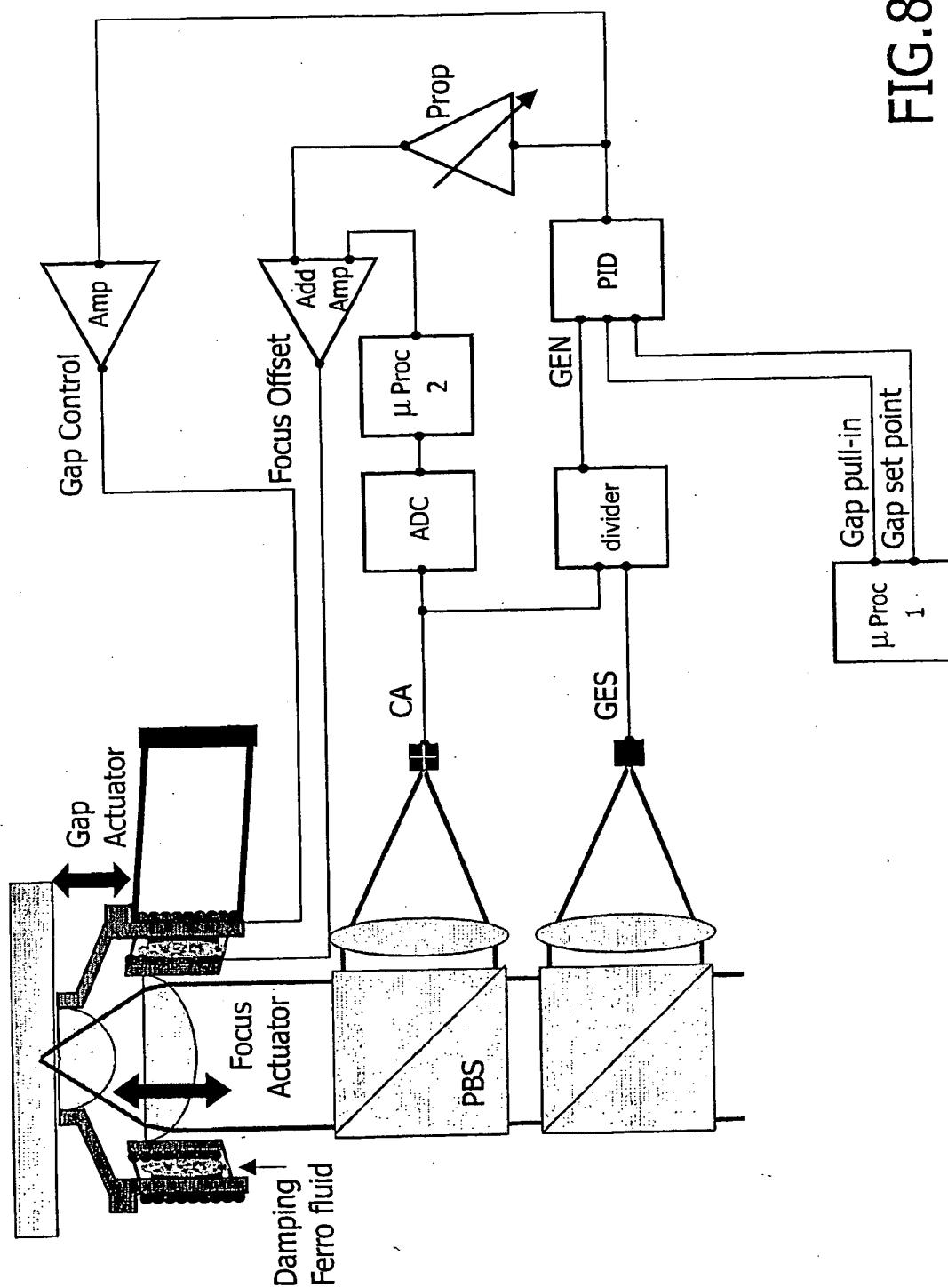


FIG.8

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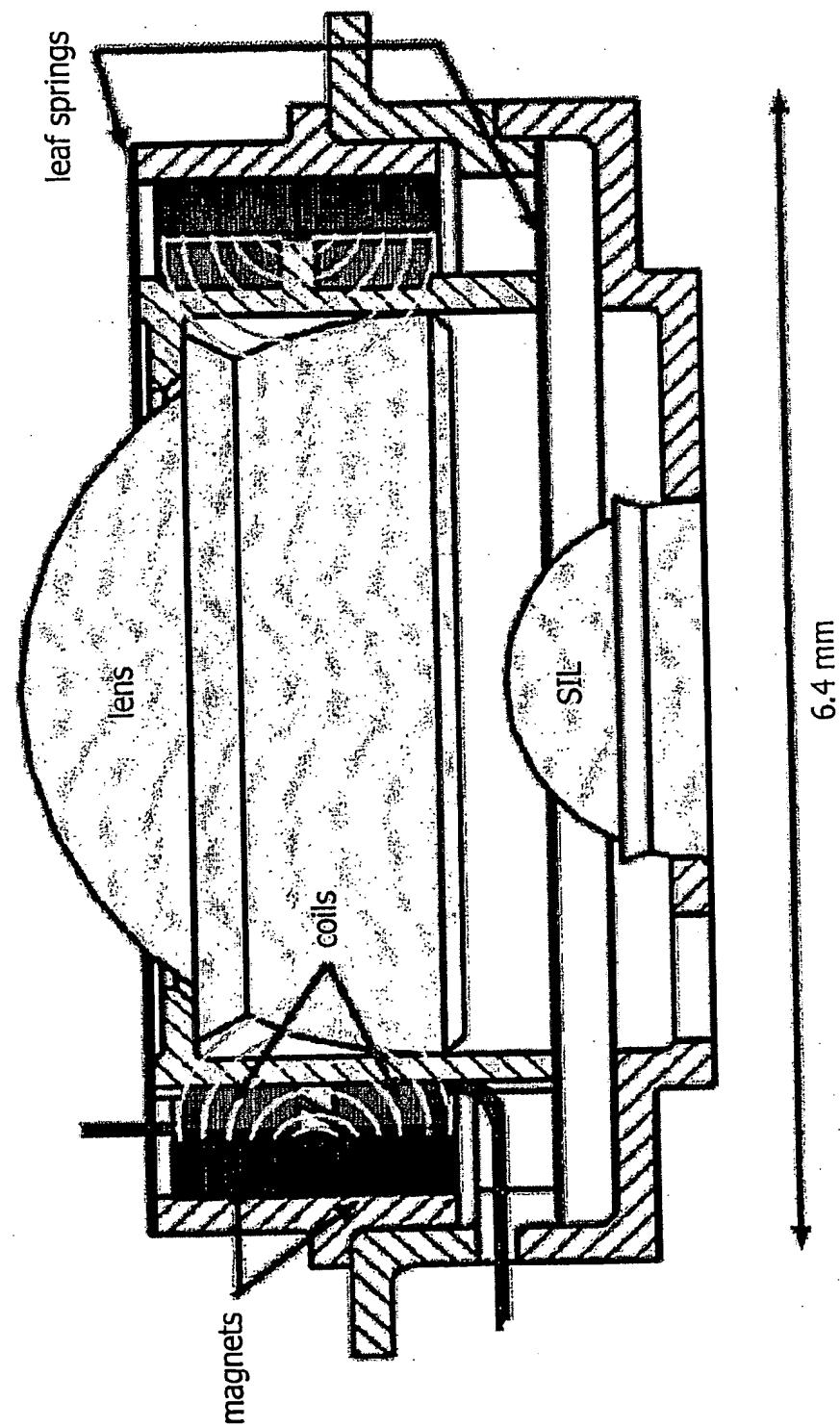


FIG. 9

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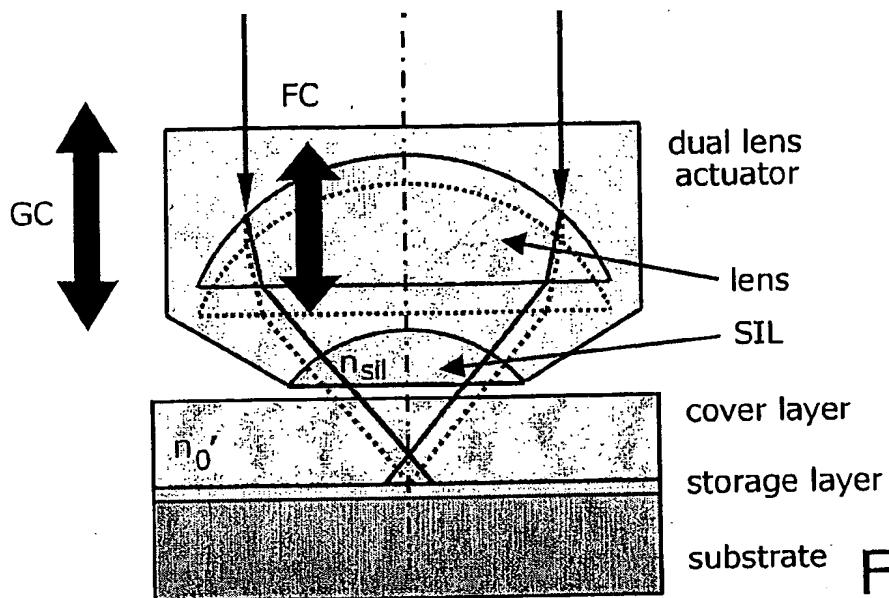


FIG.10

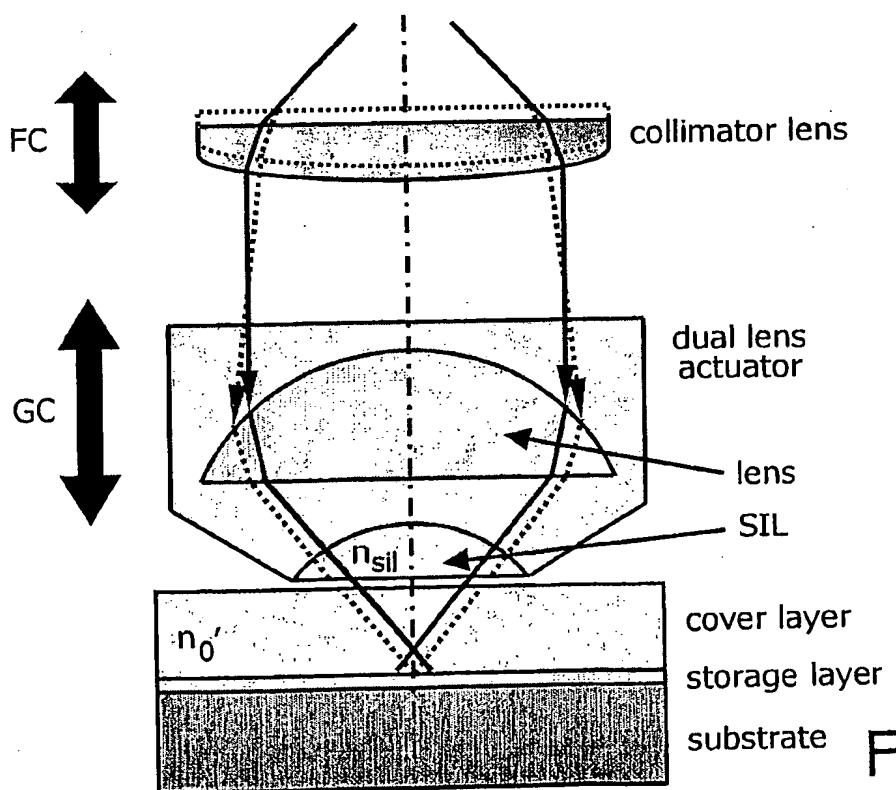


FIG.11

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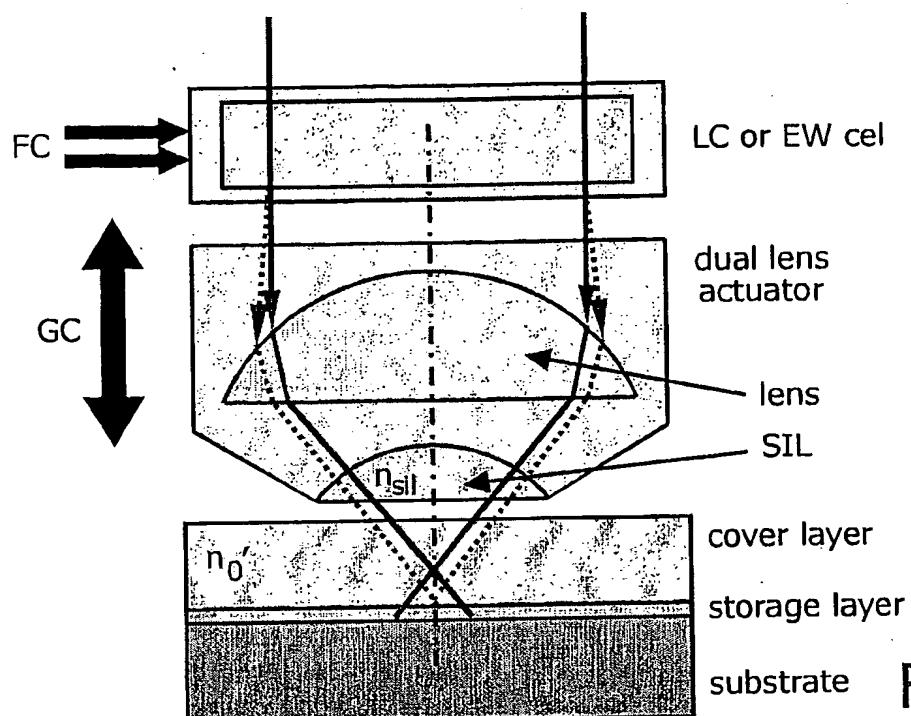


FIG.12

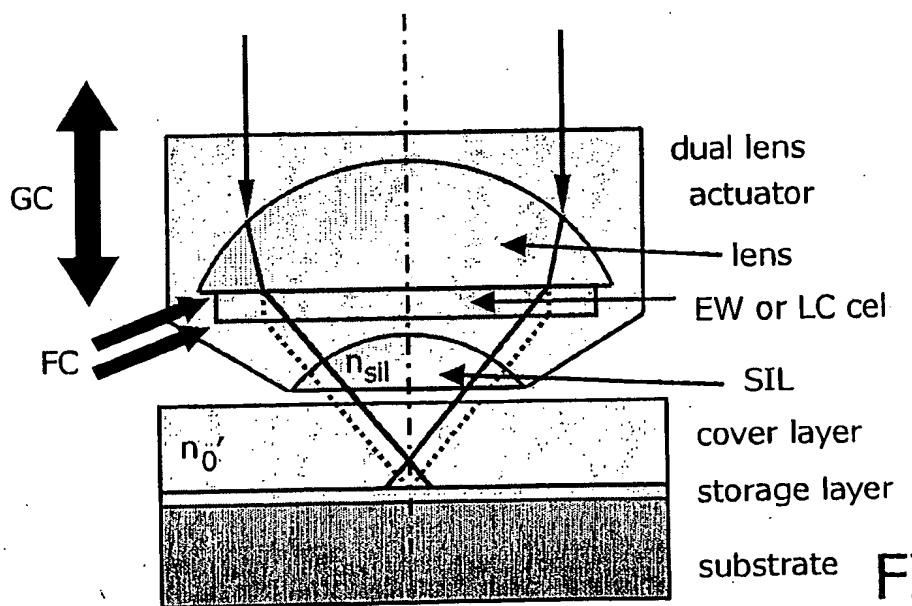


FIG.13